



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,578	12/17/2001	Bhaskar Sinha	ONET-0101 PUS	6146
27256	7590	03/07/2007	EXAMINER	
ARTZ & ARTZ, P.C. 28333 TELEGRAPH RD. SUITE 250 SOUTHFIELD, MI 48034			POPHAM, JEFFREY D	
			ART UNIT	PAPER NUMBER
			2137	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/022,578

Applicant(s)

SINHA ET AL.

Examiner

Jeffrey D. Popham

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 24 is/are allowed.
- 6) ☒ Claim(s) 12-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.



GUY LAMARRE
PRIMARY EXAMINER

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Remarks

Claims 1-10 and 12-24 are pending.

Response to Arguments

1. Applicant's arguments filed 12/14/2006 have been fully considered but they are not persuasive.

Applicant argues that there is no motivation to combine Subramaniam with Steiner and that there is no need to incorporate the Kerberos authentication service taught in Steiner into the intranet access system of Subramaniam. As seen in Figure 2 and related portions of the specification, Subramaniam creates a secure connection between the border server and external client. Using this secure connection, the user is authenticated by any of various forms (examples of which are shown in Column 12, lines 39-46). By implementing Kerberos authentication during this step (126 of figure 2), the benefits of Kerberos are obtained, as described in Steiner. Some of the obtained benefits are that Kerberos is an authentication scheme that is reliable, transparent, scalable, and difficult to circumvent. Additionally, the dual protection scheme of authenticating via Kerberos using a secure connection means that the information passed during authentication is encapsulated within such secure connection, thereby providing further protection for Kerberos authentication exchanges.

Applicant also argues that the privilege server (element 140 of figure 1) of Subramaniam is only used for validating and rejecting authentication of a user and that the privilege server of Subramaniam does not have a policy engine therein. In response

Art Unit: 2137

to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Subramaniam (U.S. Patent 6,081,900) in view of Steiner (Steiner et al., "Kerberos: An Authentication Service for Open Network Systems", 3/30/1988, pp. 1-15).

Regarding Claim 12,

Subramaniam discloses a method for accessing a service by a user comprising:

A privilege server (Figure 1, numeral 140; and Column 8, line 47 to Column 9, line 10);

A web adapter interposed between a client and the privilege server, as well as a service server (Figure 1, numeral 112; and Column 6, lines 25-38); and

Choosing a service in a service server (Column 6, lines 40-45);

But does not explicitly disclose presenting a user ticket and sequence number to a service, sending a session name encrypted with the ticket and a user identification to a privilege server and requesting a session key and sequence number, receiving the session name from the user, validating the user ticket and a user privilege, when the user is validated, issuing the session key and sequence number for the ticket, encrypting the session key and sequence number with the ticket to form a packet, and sending the packet and ticket to the service.

Steiner, however, discloses presenting a user ticket and sequence number to a service (Pages 5-7, Sections 4.0, 4.3, and 4.4);

Choosing a service in a service server (Pages 5-7, Sections 4.0, 4.3, and 4.4);

Sending a session name encrypted with the ticket and a user identification to a privilege server and requesting a session key and sequence number (Pages 6-7, Sections 4.3 and 4.4);

Receiving the session name from the user (Pages 6-7, Sections 4.3 and 4.4);

Validating the user ticket and a user privilege (Pages 6-7, Sections 4.3 and 4.4);

When the user is validated, issuing the session key and sequence number for the ticket (Pages 6-7, Sections 4.3 and 4.4);

Encrypting the session key and sequence number with the ticket to form a packet (Pages 6-7, Sections 4.3 and 4.4); and

Sending the packet and ticket to the service (Pages 6-7, Sections 4.3 and 4.4). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the authentication service of Steiner into the intranet access system of Subramaniam in order to provide an authentication scheme that is difficult to circumvent, reliable, transparent, and scalable (Pages 2-3, Section 1).

Regarding Claim 13,

Subramaniam discloses a system for authenticating a user having a user proxy for generating user information comprising:

A web adapter coupled to the user proxy for receiving user information (Figure 1, numeral 112; and Column 6, lines 25-38);

A service server coupled to the web adapter (Figure 1, numeral 104);

An intermediate server coupled to the web adapter for receiving the user information (Figure 1, numeral 106); and

A privilege server coupled to the intermediate server (Figure 1, numeral 140; and Column 8, line 47 to Column 9, line 10);

But does not explicitly disclose the privilege server receiving the user information and validating the user in response to the user information, the privilege server generating a ticket, the user proxy

receiving the ticket, generating a token and communicating the token to the privilege server, the privilege server generating a packet having a sequence number and a session key in response to the token and coupling the ticket and the sequence number to a service server through the web adapter, and the service server validating the user and granting user privileges in response to the ticket and the session key.

Steiner, however, discloses the privilege server receiving the user information and validating the user in response to the user information, the privilege server generating a ticket (Page 6, Section 4.2);

The user proxy receiving the ticket (Page 6, Section 4.2), generating a token and communicating the token to the privilege server (Page 7, Section 4.4);

The privilege server generating a packet having a sequence number and a session key in response to the token and coupling the ticket and the sequence number to a service server through the web adapter (Pages 6-7, Sections 4.3 and 4.4); and

The service server validating the user and granting user privileges in response to the ticket and the session key (Pages 6-7, Section 4.3). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the authentication service of Steiner into the intranet access system of Subramaniam in order to provide an

authentication scheme that is difficult to circumvent, reliable, transparent, and scalable (Pages 2-3, Section 1).

Regarding Claim 14,

Subramaniam as modified by Steiner discloses the system of claim 13, in addition, Subramaniam discloses that the intermediate server comprises a head end server (Figure 1, numeral 106).

Regarding Claim 15,

Subramaniam as modified by Steiner discloses the system of claim 13, in addition, Steiner discloses that the user information comprises a user identification number (Pages 13-14).

Regarding Claim 16,

Subramaniam as modified by Steiner discloses the system of claim 13, in addition, Steiner discloses that the privilege server has a policy engine therein (Pages 5-7, Section 4).

Regarding Claim 17,

Subramaniam as modified by Steiner discloses the system of claim 16, in addition, Steiner discloses that the privilege server comprises a key generator coupled to the policy engine (Pages 5-7, Section 4).

Regarding Claim 18,

Subramaniam as modified by Steiner discloses the system of claim 16, in addition, Subramaniam discloses that the privilege server comprises

a proxy coordinator coupled to the policy engine (Column 8, line 47 to Column 9, line 10).

Regarding Claim 19,

Subramaniam as modified by Steiner discloses the system of claim 16, in addition, Steiner discloses that the privilege server comprises an obfuscator/deobfuscator coupled to the policy engine (Pages 5-7, Section 4).

Regarding Claim 20,

Subramaniam as modified by Steiner discloses the system of claim 16, in addition, Steiner discloses that the privilege server comprises a store keeper coupled to the policy engine (Pages 5-9, Sections 4 and 5).

Regarding Claim 21,

Subramaniam as modified by Steiner discloses the system of claim 20, in addition, Steiner discloses that the store keeper comprises a user information list and a session information list (Pages 5-9, Sections 4 and 5).

Regarding Claim 22,

Subramaniam as modified by Steiner discloses the system of claim 20, in addition, Steiner discloses that the service server validating the user and granting the user privileges in response to the ticket, session key, and sequence number (Pages 6-7, Section 4.3).

Regarding Claim 23,

Subramaniam discloses a method of authenticating a user having a user proxy for a network system having a privilege server, a head end server and a web adapter, the method comprising:

Determining an authentication scheme at the privilege server (Column 8, line 47 to Column 9, line 10); and

Validating the user at the privilege server in response to user information in accordance with the authentication scheme (Column 8, line 47 to Column 9, line 10);

But does not explicitly disclose when the user is validated, generating a ticket for the user at the privilege server, encrypting the ticket with a user password to form an encrypted ticket, validating the user in response to a service access request token formed from the ticket and a user identification, and forming a packet having a sequence number and session key encrypted with the ticket at the privilege server to authenticate the user.

Steiner, however, discloses validating the user at the privilege server in response to user information in accordance with the authentication scheme (Page 6, Section 4.2);

When the user is validated, generating a ticket for the user at the privilege server (Page 6, Section 4.2);

Encrypting the ticket with a user password to form an encrypted ticket (Page 6, Section 4.2);

Validating the user in response to a service access request token formed from the ticket and a user identification (Page 7, Section 4.4); and

Forming a packet having a sequence number and session key encrypted with the ticket at the privilege server to authenticate the user (Page 7, Section 4.4). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the authentication service of Steiner into the intranet access system of Subramaniam in order to provide an authentication scheme that is difficult to circumvent, reliable, transparent, and scalable (Pages 2-3, Section 1).

Allowable Subject Matter

3. Claims 1-10 and 24 are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2137

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Popham whose telephone number is (571)-272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey D Popham
Examiner
Art Unit 2137